#### Cyber Transition Program—Southwest Research Institute

6220 Culebra Road, San Antonio, Texas 78228

This project is to provide cyber research for the military with potential applications to the civilian community. Amount Requested \$2,800,000

# Institute for Cyber Security (ICS) State and Local Cyber Training (Implementation of the Community Cyber Security Maturity Model and Related Research Activities)—University of Texas at San Antonio

One UTSA Circle, San Antonio, Texas 78249

This project provides research to look at determining metrics that can provide an early warning of a pending cyber attack and develops an effort to ensure the knowledge and technology is available to states and communities. Amount Requested \$4,380,000

### Texas Research Institute for Environmental Studies (TRIES)—Sul Ross State University Post Office Box C-114, Alpine, Texas 79832

This project is trying to achieve total recovery of the waste streams for sustainable water conservation in a cost-effective fashion, potentially saving \$20 billion a year for the next 20 years, enhancing military readiness as well as alleviating potential future water shortages in the United States. Amount Requested \$3,500,000

### Techniques to Manage Hemorrhage Following Combat Injury—National Trauma Institute

16500 San Pedro, Suite 350, San Antonio, Texas 78232

This project provides research to reduce American deaths and disability following injury which often results in hemorrhage, costing the lives of tens of thousands of Americans each year, including those on the battlefield as well as at home. Amount Requested \$4,500,000

### Advancing Residual Limb Health in Diabetic & Traumatic Amputees—Southwest Research Institute

6220 Culebra Road, San Antonio, Texas 78228

This project provides the research to ensure that prosthetic devices used by amputees improve the quality of their lives without putting their long-term heath at risk. Amount Requested \$4,500,000

## Strategic Biofuels Supply Program—Texas A&M University's AgriLIFE Research Center 947 West I20, Pecos, Texas 79772

This project provides a research initiative to develop and demonstrate that algae growth, harvesting and bio-oil extraction process can be commercially scaled and economically replicated for industrial production of biofuels--potentially yielding more than 5,000 gallons per acre and meeting the entire US transportation fuel requirements. Amount Requested \$8,500,000

#### **VIRUS project—McDonald Observatory**

HC 75, Box 1337-VC, Fort Davis, Texas 79734

This project helps build the "Visible Integral-Field Replicable Unit Spectrographs (VIRUS)" to research and enable the creation of a map of more than 1 million distant galaxies and help

solve the most important questions in the physical sciences. Amount Requested \$2,800,000

### Border Security High PRF Gap Filler Radar—Pecos EDC (Economic Development Corporation)

503 South Cypress, P.O. Box 1493, Pecos, Texas 79772

This research project will help demonstrate a state-of-the-art, advanced radar and signal processing technology that will significantly increase border security by providing a surveillance radar that will effectively detect any person, vehicle or air platform that operates in the vicinity of a wind turbine/farm and it will allow wind farms to be built throughout the state of Texas and around the country in any location regardless of its proximity to an existing FAA radar. Amount Requested \$3,000,000

#### Texas National Guard Joint Counterdrug Task Force—Texas National Guard

2200 West 35th Camp Mabry, Bldg 41, Austin, TX 78763

This project will provide for National Defense and Homeland Security against Drug Trafficking Organizations in the southwestern part of Texas.

Amount Requested \$5,000,000

### Flashlight Soldier-to-Soldier Combat Identification System—Southwest Research Institute

6220 Culebra Road, San Antonio, Texas 78228

This request funds research to reduce the Friendly Fire (FF) incidents, which has risen 300% per capita in the US during the 2003 invasion of Iraq compared to 1991 Desert Storm and equips the soldier with rifle mounted/body worn hardware that immediately identifies friendly soldiers and equipment at the point of engagement. Amount Requested \$5,000,000

### Center for Hetero-Functional Materials (CHM)—Sul Ross State University

Post Office Box C-114, Alpine, Texas 79832

This project enables the meaningful integration of existing research programs from different areas to form new capabilities in the research, development and commercialization of Hetero-functional Materials. This ability will drive discovery and innovation for the next generation of devices and provide a significant societal impact in the areas of energy, security and health by enabling future devices requiring many types of built-in functionality.

Amount Requested \$2,500,000